

INVESTIGATOR'S ANNUAL REPORT

National Park Service

All or some of the information provided may be available to the public

Reporting Year: 1999	Park: Shenandoah NP
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Permit#: SHEN1999N-250	
Park-assigned Study Id. #: unknown	
Project Title: A Comparison Of Volatile Organic Compounds In The Foliage Of Canadian Hemlock From The Shenandoah National Park With Canadian Hemlock Foliage From The Southern Appalachians	
Permit Start Date: Jan 01, 1999	Permit Expiration Date Jan 01, 2000
Study Start Date: Jan 01, 1999	Study End Date Jan 01, 2000
Study Status: Completed	
Activity Type: Research	
Subject/Discipline: Ecology (Aquatic, Marine, Terrestrial)	
Objectives: To compare the volatile organic compounds in the foliage of Canadian hemlock from the Shenandoah National Park after infestation by hemlock woolly adelgid with the foliage of uninfested Canadian hemlock from the Great Smoky Mountains National Park.	
Findings and Status: On October 7 and 8, 1999, foliage samples of Eastern hemlock were collected from the Shenandoah National Park as specified in our research and collecting permit (N-250). The sample sites are located along the White Oak Canyon Trail that we accessed from the Limberlost parking area near milepost 43. Approximately 100 grams of foliage was collected from each of 62 trees at three different elevations. The trees consisted of 32 saplings and 30 mature trees. All saplings had a height between two and three meters.;Site 1 was the lowest elevation site, at 2,600-2,775 feet above sea level. Samples were collected from 12 saplings and 20 mature trees at site 1.;Site 2 was an intermediate elevation site at 2,900-3,075 feet above sea level. Samples were collected from 10 saplings and 10 mature trees at site 2.;Site 3 was the highest elevation site, at 3,000 feet above sea level. Samples were collected from 10 saplings and 10 mature trees at site 3.;The laboratory work is well underway, and we expect to complete the analyses of the first set of samples by the end of the spring semester, 2000. However, due to lack of funding, we do not plan to continue the work at this time.	
For this study, were one or more specimens collected and removed from the park but not destroyed during analyses? No	
Funding provided this reporting year by NPS: 0	Funding provided this reporting year by other sources: 0
Fill out the following ONLY IF the National Park Service supported this project in this reporting year by providing money to a university or college	

Full name of college or university: n/a	Annual funding provided by NPS to university or college this reporting year: 0
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